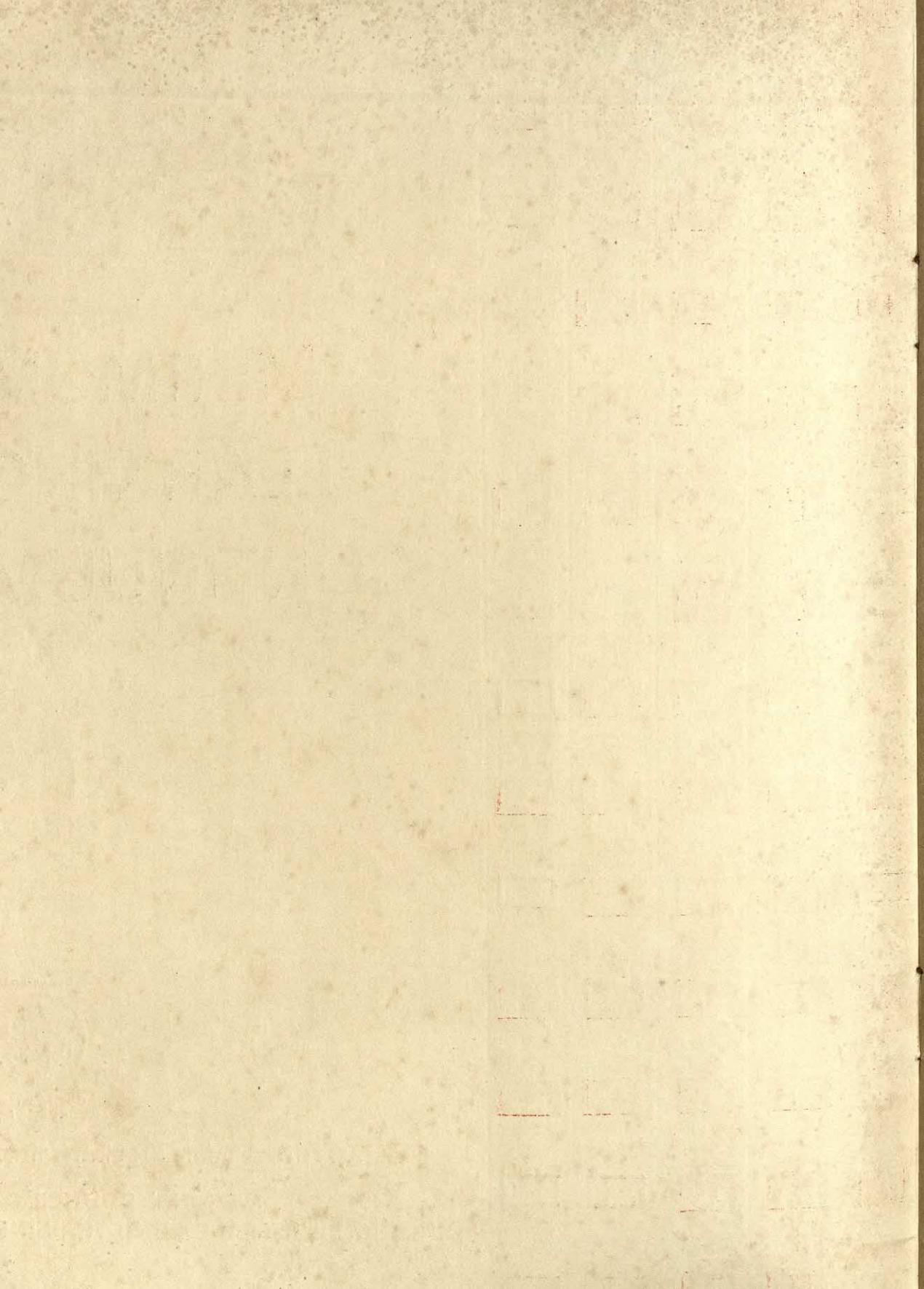


# MINIMUM LEARNING CONTINUUM

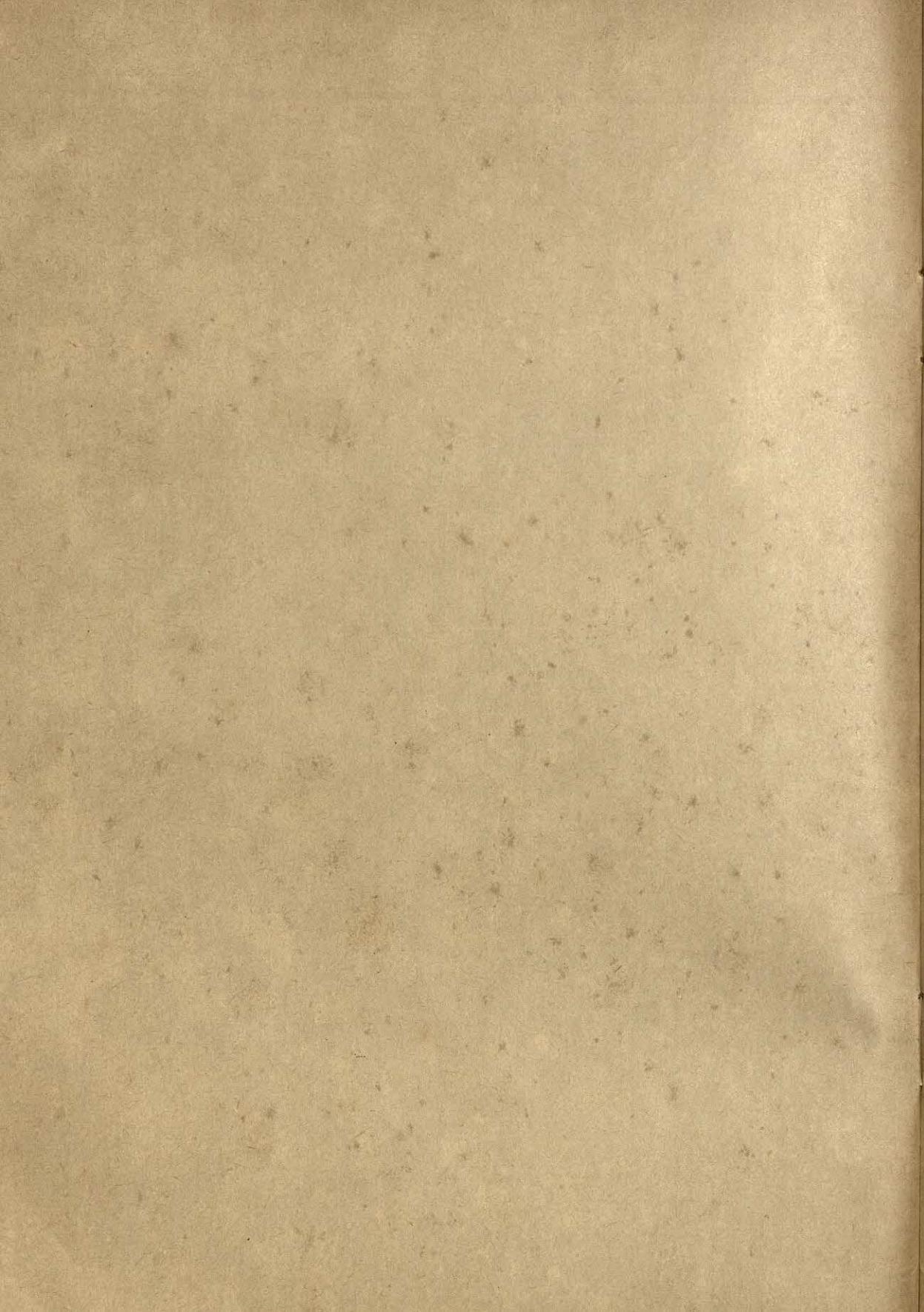


राष्ट्रीय शिक्षक अनुसंधान और प्रशिक्षण परिषद

NATIONAL COUNCIL OF  
EDUCATIONAL RESEARCH AND TRAINING



**MINIMUM  
LEARNING  
CONTINUUM**



*Publication No. 3*

# MINIMUM LEARNING CONTINUUM



*Primary Curriculum Development Cell*  
**National Council of Educational Research and Training**

*August 1979*

*Sravana 1901*

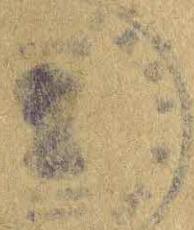
**Reprint**

*August 1983*

*Sravana 1905*

**P.D. 5 T**

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Published at the Publication Department by C. Ramachandran, Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110016, and printed at ARCEE PRESS 5, Deshbantu Gupta Road, New Delhi-110055

## **Foreword**

UNIVERSALISATION of elementary education is a top priority programme of the Government of India and every effort is being made to achieve the targets set in the various States in this regard. However, mere enrolment of children in the age group 6-14 years is not enough. The spirit of the Constitutional Directive is to provide education, which is meaningful and useful to the community and to the learners. One of the reasons why universalisation of elementary education has not taken place, is the lack of relevance of the curriculum and routine methods of instruction, which tend to lower the motivation for learning on the part of the child. While every attempt is being made to increase enrolment, it is necessary to provide for learning experiences outside the school through non-formal education for those children who may drop-out of the school at an early age. At the same time, effort has to be made to improve the curriculum, instructional materials and methods of teaching in the elementary schools so as to attract the children to learning. It is realised by most workers in the field that this goal can be achieved only if teachers are involved in the development of curriculum and the preparation of instructional materials and elementary teacher-educators take the responsibility of training the teachers in the elementary schools through in-service education programmes in making the processes of teaching and learning more interesting and attractive to the children under the care of such teachers. An improvement in the curriculum of the elementary teacher training institutions is also being attempted so that the pre-service teacher training for elementary school teachers should prepare the teachers more effectively so as to enable them to relate education more meaningfully to the life around the child.

One of the questions which must be asked in the context of universalisation of elementary education programme is : What should the children learn as the bare minimum ? It should be possible for us to specify the objectives of learning at the elementary stage in a step-wise sequence, so that one is assured of a minimum standard to be achieved in the programme of universalisation. Only when there is a specification of such objectives that it is possible to devise suitable methods of evaluation and see for ourselves whether a minimum learning has been achieved. There are imbalances not only in the matter of enrolment of children in the various parts of the country, but also

in the achievement of pupils. As a matter of fact, the achievement gap in education should be of great concern. Equalisation of opportunity is very important for the vast majority of the people living in the rural areas. But this equalisation should not mean only the facility of attending school. It should really mean the facility of developing minimum competencies as a result of the sequence of learning that takes place as the child progresses in school.

It is in this context that the development of a competency-based Minimum Learning Continuum is a matter of great significance. Such a Minimum Learning Continuum (MLC) provides the common basis for developing a variety of local specific curricula to suit the needs of the diverse groups of children living in various parts of the country. It provides a framework which is uniform and within which diversity of curriculum and instructional materials can easily fit in.

A significant feature of the MLC is that it has been evolved through the involvement of a large number of teams at the national and state level, including the teachers of 450 schools of 15 states participating in projects 'Primary Education Curriculum Renewal' (Project 2) and 'Developmental Activities in Community Education and Participation' (Project 3). All the members of State Primary Curriculum Development Cells (SPCDCs) and PCDC, NCERT, have been actively involved in the development of the MLC. Involvement of a large number of primary school teachers working in schools located in backward and deprived areas would help to ensure suitability of the MLC in the poorest of our primary schools. The terminal competencies identified in the MLC represent the competencies required of any child to live as a useful and productive member of society and for a rewarding personal life. The minimum has been identified keeping in mind the vast majority of children in the country. The minimum, however, does not prevent a child from achieving beyond it. The concept of continuum provides for further deepening as well as extension of learning outcomes depending upon the capacities of children.

The MLC will immediately provide a basis for the development of curriculum materials and methods under Projects 2 and 3. In the expansion phase of these projects an attempt is being made to select groups of schools which are representative of major socio-economic, cultural and geographical variations in each of the States/Union Territories. Thus the materials and methods developed to suit the needs of different groups of children in a State, will provide an effective basis for curriculum reform in the context of universalization of elementary education in each of the States/Union Territories.

The development of MLC has been a very challenging task. As a first venture of its kind, it is likely to be further refined in the process of use by a large number of curriculum teams in the States/Union Territories. The suggestions from curriculum workers and those interested in primary education will be gratefully received by the Primary Curriculum Development Cell, NCERT.

We appreciate and record our gratitude to all members of SPCDCs and the staff

of the teachers training institutes and primary schools who have participated in the exercise of developing and trying out the MLC. We are grateful to all the consultants, resource persons, participants of the workshops and members of working committees for their valuable contribution to the development of MLC. I am particularly grateful to Prof. S. R. Rohidekar for not only participating in the two workshops but also for making a very significant contribution as a member of the Steering and Editorial Committees. My thanks are also due to all other members of the Steering and Editorial Committees.

I am particularly indebted to Shri J. Ratnaike, Educational Adviser, UNESCO, Bangkok, for his valuable guidance. I am also grateful to UNICEF for their continuous support and encouragement in this project.

The members of the PCDC Team (NCERT) have put in an exemplary effort in the development of the MLC in such a short period of time. My thanks are due to all the members of the PCDC Team.

Mrs. Shukla Bhattacharya *nee* Mazumdar, Reader, PCDC, has shared the major responsibility for organising the Working Group Meeting and the two National Workshops. She has also helped in coordinating this project. My thanks are due to her. Shri S.H. Khan, Reader, PCDC, assumed a very active role in developing and editing the MLC. We are grateful to him. The cover page has been designed by Shri R.K. Chopra, Lecturer, PCDC. My thanks are due to him.

In the end, I record my appreciation and gratitude to Prof (Smt.) Adarsh Khanna, Coordinator and Head, PCDC, under whose direction and leadership, MLC has been developed.

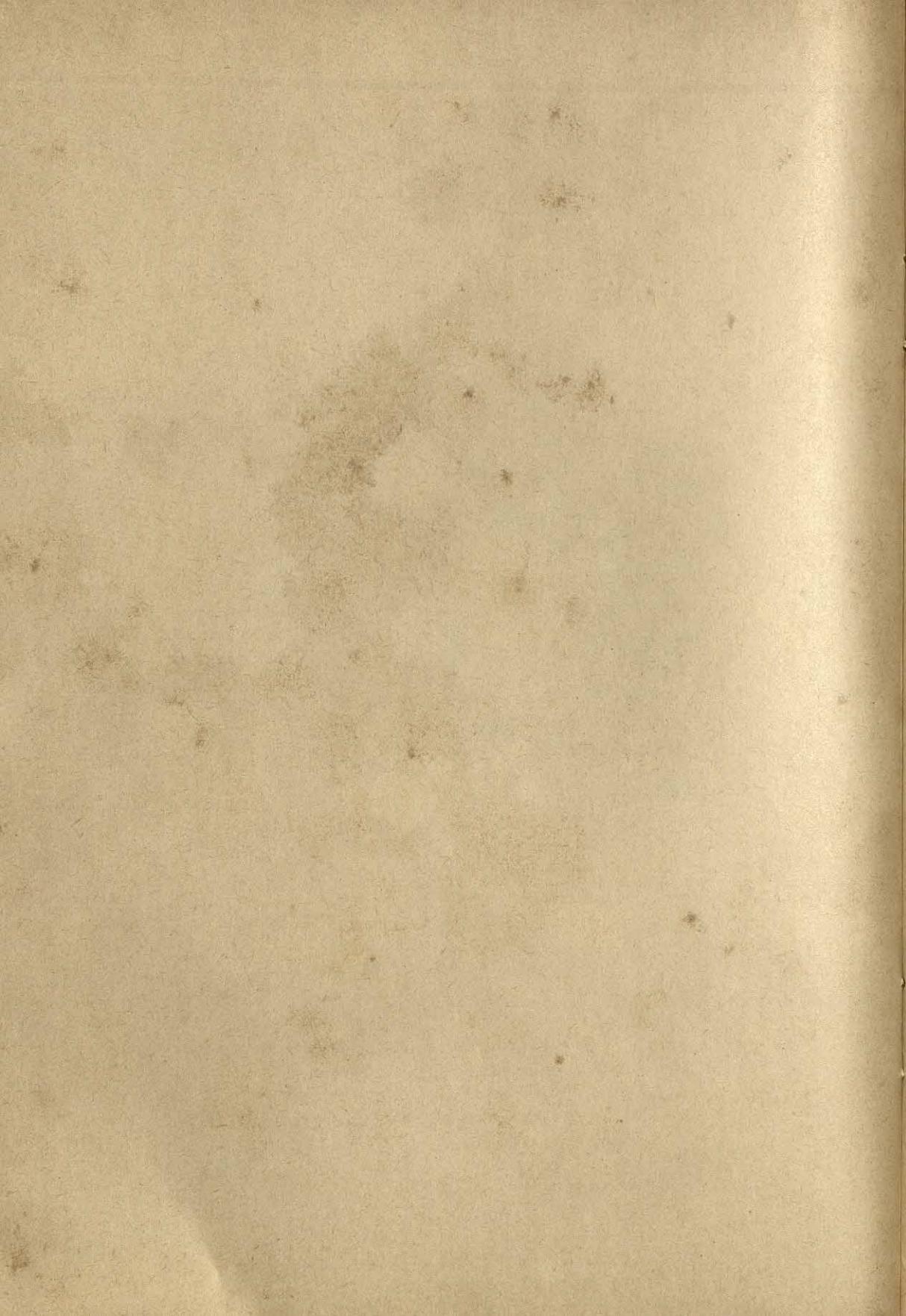
SHIB K. MITRA  
Director  
*National Council of Educational  
Research and Training*





## Contents

FOREWORD	...	...	...	...	...	...	v
1. INTRODUCTION	...	...	...	...	...	...	1
2. CONCEPT OF MINIMUM LEARNING CONTINUUM	...	...	...	...	...	...	4
3. TERMINAL COMPETENCIES	...	...	...	...	...	...	6
4. MINIMUM LEARNING CONTINUA	...	...	...	...	...	...	11
<i>Language</i>	...	...	...	...	...	...	11
<i>Mathematics</i>	...	...	...	...	...	...	16
<i>Environmental Studies</i>	...	...	...	...	...	...	26
<i>Healthy Living</i>	...	...	...	...	...	...	33
<i>Socially Useful Productive Work</i>	...	...	...	...	...	...	37
<i>Creative Expression</i>	...	...	...	...	...	...	40
5. ANNEXURE	...	...	...	...	...	...	43



## Introduction

TOWARDS the fulfilment of the Constitutional Directive, the Government of India has launched a massive programme of Universalisation of Elementary Education. The major focus of this programme is on the children from disadvantaged population including drop-outs and those who have never gone to school. To achieve the goal of universalization of elementary education, it is necessary to resort to various modalities of education—formal as well as non-formal.

In view of the socio-economic, cultural and geographical variations the programme of universalisation of elementary education will have a pronounced emphasis on local specific relevant learning experiences through decentralised curriculum development. Necessary local variations and adaptations will be reflected in the instructional materials and methods.

The programme of universalisation of elementary education is thus characterised by (a) flexibility and variety of learning experiences, (b) formal and non-formal systems and (c) provision for multiple entry into the formal system of education. In view of these characteristics there is need to establish the credibility of the programme in a society which is predominantly certificate-conscious and employment-oriented. As an answer to this problem the exercise of developing Minimum Learning Continuum based on competencies to be expected of all children at the end of the primary stage of education (Classes I to V), has been undertaken. The common-base competencies would help to avoid the criticism that third-rate learning experiences are being provided to children from the disadvantaged sections of society, thus destroying the very roots of the reforms contemplated in the programme of universalisation of elementary education.

In this context, the Government of India, Ministry of Education and Social Welfare, sought consultancy of Shri J. Ratnaike, Educational Adviser, UNESCO, Bangkok. Shri Ratnaike visited India (16 September—18 October 1978) and submitted his report on 'Primary Education Reform in the Context of the Universalisation Programme'. The

report suggested that

- a minimum learning continuum based on the most essential competencies be defined to form a common base for *all learners*, irrespective of their mode of learning;
- learning episodes should be developed relating to local specific situations to make learning relevant;
- graded tests should be evolved to help learners achieve the desired level of competencies; and
- there should be decentralisation and flexibility in the development of curriculum and its organisation.

As a follow-up of this recommendation, a working group consisting of members from the Primary Curriculum Development Cell (PCDC) of NCERT and some Directors from the State Institutes of Education met on 8 and 9 November 1978 at the NCERT campus, New Delhi, to discuss guidelines for developing the Minimum Learning Continuum. On the basis of these guidelines the members of each of the State Primary Curriculum Development Cells (SPCDCs) in the 15 States participating in the Projects relating to 'Primary Education Curriculum Renewal' (Project 2) and 'Developmental Activities in Community Education and Participation' (Project 3) developed the first draft of Minimum Learning Continuum, independently. Simultaneously, the members of the PCDC team (NCERT) also developed a list of competencies expected of a child at the end of primary education (Class V) based on the criteria evolved for this purpose. These competencies were then compared with the objectives of primary education as enunciated in the Ishwarbhai Patel Review Committee Report on Ten Year School Curriculum. Based on this comparison, a few modifications were made to ensure that no important essentials were left out. A few samples of Minimum Learning Continuum were also developed.

As a next step, a national level workshop was organised at the NCERT, New Delhi, from 11-22 December 1978. Thirteen States participated in the workshop. As a result of the discussions and work done by the State teams and the NCERT team, a draft of Minimum Learning Continuum was prepared along with a time-bound sequence of action for sample try-out in all the 15 States participating in Projects 2 and 3.

The participating States translated the draft Minimum Learning Continuum in their respective regional languages and tried out some samples of competencies in the Project Schools. They also sought the opinions of teachers, teacher educators and community members and prepared State-wise reports.

The revised drafts of the Minimum Learning Continuum from each State were again discussed in the second national level workshop held at Chamba (Himachal Pradesh) from 22-31 May 1979. As a result of thorough discussions in the workshop, the final draft of the Minimum Learning Continuum (MLC) has been drawn up.

The main features of this Minimum Learning Continuum are :

- the MLC is divided, for the sake of convenience, into six areas, viz. Language, Mathematics, Environmental Studies, Healthy Living, Socially Useful Productive Work, and Creative Expression;

- it is based on competencies most essential for the child—as an individual and as a socially useful productive member of society;
- it provides for relevance and flexibility as the learning episodes have to be evolved from local and real life situations; and
- it requires the gradual development of children, through experience, experimentation and critical thinking.

It is thus integrally related to the main objectives clearly enunciated in Ishwarbhai Patel Committee Report viz. preparing the child (1) to function as a productive and socially useful citizen and (2) for a rewarding personal life.

Development of a Minimum Learning Continuum for the primary stage of education, based on the most essential competencies expected of a child is a very significant event. It provides an opportunity and a tool to the nation to give a desirable direction to primary education. An important feature of the MLC is that it has been evolved through pooling the experiences of a large number of state curriculum teams and teachers of primary schools engaged in the projects on 'Primary Education Curriculum Renewal' and 'Developmental Activities in Community Education and Participation'. These UNICEF-assisted projects launched during the Fifth Five Year Plan, have provided a unique opportunity to the State teams grappling with the problems of evolving need-based relevant curricula, specially with reference to the needs of the children of the deprived sections of the society, to come closer and have frequent exchange of experience. These two projects have been regarded as forerunners to the programme of universalisation of elementary education. The projects are now being further expanded in the existing 15 States and are also being extended to all the remaining States and Union Territories. The strategy for the expansion phase, would be to identify all possible major socio-economic, cultural and geographical variations in a State and evolve effective local specific curricula for the different groups, based on the competency-oriented Minimum Learning Continuum. Thus the MLC would provide a basis for revision of curriculum already developed under Projects 2 and 3. It will also provide a basis for primary curriculum development in all the States and Union Territories which are now likely to participate in these projects. The MLC also provides a basis for developing local specific learning episodes through the involvement of Teacher Training Institutes under the project 'Comprehensive Access to Primary Education in the Context of the Programme of Universalisation'. The present draft of the MLC being the first joint venture of the NCERT and the 15 State curriculum teams, though provides an effective base for further work, will get refined as it is used in a large variety of situations in different States. It is hoped that during the process of using the MLC, the curriculum teams of the participating States and the Union Territories, will further contribute towards its refinement.

## Concept of Minimum Learning Continuum

IN the programme of universalisation of elementary education now launched by India, the goal of education is to enable the individual to acquire knowledge, skills, habits, attitudes and values necessary for (1) a successful performance of his responsibilities as a citizen and (2) a rewarding personal life.

We should, therefore, keep in view learning required by children not only in their present circumstances, but also their life in future as adults. It is impossible to forecast specifically the nature of society that will be existing say, after thirty or forty years, if we take into account the rapid changes that have occurred during the last twenty years. The children, therefore, need to develop their abilities in such a way that when they grow, they have the adaptability and capacity to deal flexibly with the world of the future both for a happy personal life and for functioning successfully as a responsible citizen in a society.

To help children achieve this capacity we need to identify the most essential competencies, attitudes and values rather than learning facts and information, much of which may rapidly become out-dated and irrelevant for future needs. It may be realised that in the process of learning in real life situations factual knowledge will also accrue and will grow in relation to relevant situations. In this process the overall coordinated development of the children will be sure but gradual.

In this connection, it must be noted that in the circumstances existing in India today, the formal system alone will not be able to achieve universalisation. It has to be supplemented by own-time, part-time education through the non-formal system. But the society being certificate-conscious for employment, we need to establish the bonafides of the non-formal system.

We, therefore, need to identify the *Minimum Learning Continuum* commonly applicable to all learners, whatever the mode of their learning may be. We should be clear,

however, about the definition and meaning of the terms and the criteria to be adopted.

#### **Minimum Learning**

This is defined as learning based on the essential competencies expected of most of the children by the end of five years of primary education.

'Learning' is not a collection of facts and information and memorising it. It is an outcome of experience in real life situations and supported and strengthened by related classroom work. It is thinking-oriented since the process requires the learner to raise questions and find out answers through experience and discussion.

The curriculum must, therefore, be capable of catering to a wide range of learners and learning situations. It has to be built around local situations which vary largely. Yet, the basis must be a *core of competencies* common for all, for comparability and accreditation. This core has to be minimal. Hence learning based on it is termed as 'minimum learning'. This minimum learning should not be taken as an ultimate limit. Enough scope should be given to children to go beyond it, depending on their capabilities.

#### **Continuum**

This is defined as a progression of a competency from the earliest learning experiences to the level expected to be achieved at the end of five years of primary schooling.

While education should be viewed as an integrated whole, to develop one continuum for all competencies together would lead to vagueness. For clarity and practical application, it would be preferable to develop a number of continua based upon the desired terminal competencies.

The level of achievement at any stage in the continuum is the level of thoroughness or mastery, adequate to facilitate further development and ensure functional utility. For purposes of convenience, the continuum is to be developed through stages grade-wise (Classes I to V). It could then be used as a yardstick for deciding the point of entry for those who would avail of the multiple-entry opportunity. Basically, the continua of competencies are useful for developing learning situations. They will also help the learner to know where he stands and to make relevant efforts to reach higher levels. It is also emphasised that in the process of development of the child, a continuity is maintained between home, school and the community.

Basic considerations for arriving at the essential competencies have been

- the needs of the child and his capacity to learn;
- understandings, skills and attitudes developed as a result of his experiences at home and community;
- expectation that the child should grow in such a manner that he can function later as a useful and productive member of the society; and
- need for proper emphasis on character development and values related to democracy, secularism and social justice.

Keeping in view these considerations on one hand and the limitations of the resources on the other, the Minimum Learning Continuum has been evolved.

## Terminal Competencies

It is important to decide the type and level of minimum learning outcome in terms of competencies at the end of primary education. These competencies have been termed as terminal competencies. The terminal competencies stated here are those competencies expected to be achieved by most of the children at the end of primary education (Classes I-V). A terminal competency mentioned at Class V is the culminating point in a continuum subsuming all the other sub-competencies mentioned in the earlier classes.

The basic considerations for arriving at these competencies have already been discussed in the previous chapter. For stating these competencies and developing Minimum Learning Continuum based on these, the following criteria were adopted :

- competencies should generally be stated in behavioural terms ;
- to illustrate the class-wise sub-competencies, examples from content areas may be given wherever necessary, which should not be prescriptive or exhaustive ;
- each of the terminal competencies should be broken into sub-competencies and placed in gradual graded progression to form a continuum. Sub-competencies of a particular terminal competency need not necessarily begin from Class I and continue upto Class V. Depending on the nature of a terminal competency the starting and terminal points in continuum will vary ;
- class-wise sequence of competencies should not be regarded as rigid. There should be scope for minor adjustments ;
- sub-competencies stated from top to bottom should provide an over-all idea of the total competencies to be achieved by children of a particular class.

Taking into consideration the above criteria a list of terminal competencies and the Minimum Learning Continuum in the areas of Language, Mathematics, Environmental Studies, Healthy Living, Socially Useful Productive Work and Creative

Expression were developed.

While reading and interpreting the Minimum Learning Continuum, the following points may be taken into account :

1. Sub-competencies of a terminal competency suggested for a particular class should be read from top to bottom before passing on to the sub-competency of the same terminal competency suggested for the next class. This will provide the total picture of the progression on a continuum.
2. While going through the total sub-competencies from top to bottom for a particular class one may come across some repetitions and overlappings. This was inevitable in the process of developing the continuum. These can be removed while developing the materials and teaching-learning strategies.
3. It may be felt that competencies relating to some areas are too many. While developing the total curriculum for the primary level, a lot of overlapping in different areas will automatically be removed, thus lessening the load on curriculum.
4. It may also be noted that one activity can contribute towards the development of more than one competency. Similarly, a number of different activities may be helpful towards the development and reinforcement of a given competency. This will further lessen the load on the curriculum.
5. The Minimum Learning Continuum in different areas includes a number of value-oriented competencies and attitudes. These competencies need not be regarded as being exclusive responsibility of any one area of the curriculum. These competencies can be effectively acquired through repeated activities and practice over a period of time through all the areas of the curriculum.
6. The Minimum Learning Continuum presented here will provide basis for developing curriculum—materials and methods. It need not be taken for a syllabus or a curriculum.

The terminal competencies relating to the six broad areas of curriculum are listed here. The continuum in respect of the terminal competencies in each of these areas is given in the next chapter.

#### LANGUAGE

##### 1. Listening

- Grasping the main points of the conversation, story, speech and discussion
- Getting at the central idea
- Knowing the feelings of the speaker
- Enjoying listening to poems, stories, plays and discussions

##### 2. Speaking

- Speaking correctly and clearly
- Participating in conversation and discussion
- Narrating simple and short stories
- Describing in simple words what is observed, heard, read or experienced
- Expressing one's thoughts and feelings

### 3. Reading

- Reading with comprehension a variety of printed material, e.g. picture books, comics, simple stories, textbooks, road signs and notices etc.
- Reading and reciting with correct pronunciation, intonation, stress and fluency
- Reading silently and with speed
- Reading for enjoyment and information
- Reading handwritten material

### 4. Writing

- Writing legibly, neatly, correctly and with proper punctuation
- Writing short accounts of personal experience
- Writing simple description of events
- Writing simple letters, applications, etc.

## MATHEMATICS

### 1. Ability to Use Numbers

- (a) Counting numbers up to 100
- (b) Recognising, reading and writing numbers up to 100,000
- (c) Comparing and arranging numbers up to 100,000
- (d) Understanding the concept of place value of numbers up to five digits
- (e) Recognising and reading Roman numerals up to XII
- (f) Recognising and reading the ordinal numbers up to 100th

### 2. Ability to Compute

- (a) Adding two or more numbers (sum not to exceed 100,000)
- (b) Subtracting one number from another number (up to 5-digit number)
- (c) Multiplying a number by another number  
(multiplier may be up to 3-digit number)
- (d) Dividing a number by another number (dividend may be up to 4-digit number and divisor may be up to 2-digit number)
- (e) Solving problems involving three operations using not more than 5-digit number at any stage in the operation
- (f) Using unitary method to solve simple problems of day-to-day life

### 3. Ability to Use Standard Units of Money, Length, Weight, Capacity, Area and Time

- (a) Recognising all Indian coins and currency notes
- (b) Using coins and currency notes in day-to-day transactions
- (c) Knowing and using measures of length
- (d) Knowing and using measures of weight
- (e) Knowing and using measures of capacity
- (f) Calculating area
- (g) Reading calender and reading time
  - (i) Reading calender

- (ii) Reading time
- (iii) Reading timings from railway or bus time table written on boards

**4. Understanding and Using Fractions (denominators not to exceed 2-digit number)**

- (a) Understanding the structure of proper, improper and mixed fractions (denominators not exceeding 2-digit number)
- (b) Adding and subtracting simple fractions and mixed fractions (denominators not exceeding 2-digit number)

**5. Understanding Geometrical Forms and Shapes**

- (a) Recognising and classifying various solids available in the environment (cuboid, cube, sphere, cone, cylinder).
- (b) Recognising and classifying plane shapes (square, rectangle, circle and triangle).
- (c) Recognising a point, a line and an angle.
- (d) Drawing a point, a line, an angle and plane shapes.

#### ENVIRONMENTAL STUDIES

1. Observing and formulating precise questions relating to natural and social environment
2. Recording and reporting systematically
3. Collecting information from relevant sources for using it in a given situation
4. Classifying objects, events, phenomena, social and physical data based on given criteria
5. Identifying and understanding cause and effect relationship
6. Drawing simple inferences on the basis of experiences
7. Designing simple experiments to solve problems
8. Drawing free-hand maps and locating places in the map
  - (i) Drawing free-hand sketches and tracing of maps
  - (ii) Locating places in the map
  - (iii) Indicating directions and distances
9. Taking care of living things in the environment and showing interest in the environment.
10. Avoiding wastage of natural resources
11. Avoiding pollution of natural environment and keeping the surroundings clean
12. Living cooperatively
13. Showing respect to various cultures and religions
14. Taking care of private and public property
15. Questioning various practices in the society to negate superstitions
16. Showing respect to the rules and laws of school, society and the Government

#### HEALTHY LIVING

1. Knowing the nutritive value of locally available food stuffs and preparing and keeping them in a hygienic way

2. Participating in activities related to storage, purification and hygienic use of water
3. Understanding the importance of personal hygiene and participating in activities related to it
4. Understanding the importance of community hygiene and participating in activities related to it
5. Participating in physical education and recreation
  - (a) taking part in physical exercises
  - (b) taking part in games
  - (c) participating in recreational activities
  - (d) practising *asanas*
6. Understanding the importance of safety measures and using elementary First-Aid measures

#### SOCIALLY USEFUL PRODUCTIVE WORK

1. Participating in manual and other work in and around the home
2. Recognising and appreciating the contribution made to the community by different occupations and different types of work, including social work
3. Participating in the work in the school and community cooperatively and enthusiastically
4. Showing concern for the judicious use of resources in work situations
5. Using and maintaining simple work tools with safety
6. Keeping the working environment clean and tidy

#### CREATIVE EXPRESSION

##### *Appreciating beautiful things*

1. Drawing simple things like trees, animals, human beings, etc.
2. Using opportunities for artistic expression related to local life through song, dance, drama, etc.
3. Displaying and decorating with locally available articles
4. Modelling with clay and cardboard

## Minimum Learning Continua

### LANGUAGE

LANGUAGE is primarily a tool of communication and as such is required to be mastered for functioning meaningfully and effectively in society. Though a child learns the basic structure of his language and starts using it for communicating his needs and information quite early in his life, he still has to learn to use this tool in a wider variety of situations and for a number of purposes. Moreover, a child learns in his pre-school years only the spoken or primary code of the language. In order to become literate, he still has to learn the secondary or written code of his language. Learning in this area has become all the more crucial in modern, highly organised and technical world. The objectives of language teaching at primary stage, therefore, are two :

- (a) To teach the child the written form of language and
- (b) to make him proficient in the effective use of his language in a variety of situations of his day-to-day life

To reach these goals the child is required to learn the following language skills :

Listening  
Speaking  
Reading  
Writing

As the child grows into an adult, he increasingly uses language as a vehicle of thought and means of self-expression. Ability to use language as a tool of communication is a basic minimum essential competency required by an individual for day-to-day functioning. Minimum Learning Continuum therefore emphasises the learning of language primarily as a tool of communication.

Various terminal as well as sub-competencies have been shown in the continuum

separately for the obvious purpose of clarity and understanding. The curriculum framers, text-book authors and classroom teachers have to keep in mind the fact that in actual learning situations, there would always be present more than one language competency. For example, when a child reads aloud, he uses simultaneously three language competencies, i.e., reading, speaking and listening.

Moreover, a number of sub-competencies overlap in respect of their starting point. Whenever a sub-competency has been shown starting in Class III or IV, it does not mean that before that nothing had happened in that area of learning. It simply means that previous classes were a preparatory stage for the development of that sub-competency.

Thirdly, the four terminal competencies included in this continuum have been sequenced in the order in which a child learns them in his early years and should not be interpreted as in an hierarchical order. There is a lot of evidence to show that an individual may be a very good reader and writer but poor listener and speaker. However, an individual's level of mastery in productive skills, i.e., speaking and writing is normally lower than his proficiency level in receptive skills, i.e., listening and reading. The present continuum has been developed bearing this fact in mind.

In the context of language teaching at the primary stage, the presence of local dialect is a crucial factor to be borne in mind. The general principle to deal with the situation is to affect a phased and gradual transition from dialect to standard language.

*Note—Minimum Learning Continuum presented here should be read class-wise from top to bottom*

**Minimum Learning Continuum—Language**

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
<b>1. Listening</b>				
— Grasping the main points of conversation, story, speech and discussion	— listening patiently — following direction — understanding conversation	— listening with concentration and attention — grasping the main theme of a simple story, poem and conversation	— listening with concentration and attention — understanding the relationship between events, facts and feelings expressed in a story, play and conversation.	— listening with concentration and attention — drawing simple inferences from a story, play, conversation, discussion and local news
— Getting at the central idea	— grasping main points of a simple story	— enjoying listening to poems, stories and plays	— enjoying listening to poems, stories, plays and discussions	— knowing the feelings of a speaker in a play or conversation
— Knowing the feelings of the speaker	— enjoying listening to simple poems and stories			— enjoying listening to stories, plays, poems and discussion
— Enjoying listening to poems, stories, plays and discussion				
<b>2. Speaking</b>				
— Speaking correctly and clearly	— speaking with correct pronunciation, proper intonation and stress	— reciting poems and telling stories with correct pronunciation, intonation, stress and fluency	— reciting poems from memory, narrating and dramatising stories with correct pronunciation and appropriate intonation and stress	— reciting poems, singing songs, telling titbits etc. with proper modulation
— Participating in conversation and discussion	— conversing with peers and family members with ease	— conversing naturally with adults outside the family circle	— participating in discussion on topics of local relevance and importance	— making announcements and giving directions with clarity
— Narrating simple and short stories				

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
<ul style="list-style-type: none"> <li>— Describing in simple words what is observed, heard, read or experienced</li> <li>— Expressing one's thoughts and feelings</li> </ul>	<ul style="list-style-type: none"> <li>— practising appropriate oral courtesies in informal situations</li> <li>— replying questions in simple, and correct language to questions put by parents, peers, teachers and neighbours using speech for communicating one's needs and simple information</li> </ul>	<ul style="list-style-type: none"> <li>— practising oral courtesies in formal situations in the classroom like telling a story, addressing the class</li> <li>— telling simple stories and tit-bits</li> <li>— describing in simple words and sequential order what is observed or heard</li> <li>— replying relevantly in a few simple sentences to questions on a story heard or incident narrated</li> </ul>	<ul style="list-style-type: none"> <li>— practising oral courtesies in situations like thanking, welcoming and bidding farewell to guests in school and at home</li> <li>— describing in simple words what is read</li> <li>— replying questions on what is read correctly</li> </ul>	<ul style="list-style-type: none"> <li>— practising oral courtesies in different social situations in school as well as in the community</li> <li>— conversing naturally in various social situations</li> <li>— participating in discussions on locally relevant problems logically and effectively</li> <li>— expressing one's thoughts, feelings and opinions in different situations</li> <li>— giving logical and precise answers to questions on what is observed, heard or read</li> </ul>

### 3. Reading

<ul style="list-style-type: none"> <li>— Reading with comprehension a variety of printed material, e.g., picture books, comics, simple stories, textbooks, road signs and notices etc.</li> </ul>	<ul style="list-style-type: none"> <li>— associating letters with sounds and recognising letters and words etc.</li> <li>— reading simple connected sentences</li> </ul>	<ul style="list-style-type: none"> <li>— reading sign-boards, name-plates and road signs</li> <li>— reading connected sentences in small paragraphs and grasping the facts, events etc. included in them</li> </ul>	<ul style="list-style-type: none"> <li>— reading stories, poems, simple descriptive accounts etc. recognising new words and comprehending their meaning according to context and by association</li> </ul>	<ul style="list-style-type: none"> <li>— reading a variety of materials</li> <li>— understanding the point of view of the author</li> <li>— forming one's own opinion</li> <li>— reading silently with increased speed</li> </ul>
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<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
—Reading and reciting with correct pronunciation, intonation, stress and fluency.	—reading aloud letters, words, and sentences with correct pronunciation	—reading and understanding instructions written on the notice board	—drawing inferences on the basis of facts ideas and feelings etc. present in the material read	—enjoying reading materials of one's own choice
—Reading silently and with speed		—establishing relationships between the facts, ideas, feelings etc. present in the simple reading material	—reading silently with speed	—reading letters and other handwritten materials
—Reading for enjoyment and information			—reading a variety of material for enjoyment	
—Reading handwritten material		—reading silently with ease	—reading outside the textbooks for information	
		—reading comics and simple short stories outside the textbooks	—reading hand-written letters	
		—reading the handwriting of the classmates and teachers		

**4. Writing**

—Writing legibly, neatly, correctly and with proper punctuation	—writing letters and words in proper formation and relative size	—writing sentences with proper letter formation, spacing, alignment, slant and relative size	—writing a few connected sentences neatly and legibly	—writing for communicating ideas, feelings, personal experiences etc.
—Writing short accounts of personal experience	—writing words with correct spellings	—writing words with correct spellings	—writing words with correct spellings	—reproducing from simple stories, manuscripts, descriptions of events
—Writing simple descriptions of events	—writing a few simple sentences correctly	—using full stop and comma for punctuation	—using appropriate punctuation neatly	—writing applications and letters
—Writing simple letters/applications etc.		—describing an event in a few connected sentences correctly, using appropriate vocabulary	—writing simple descriptions of familiar objects	—writing simple applications

## MATHEMATICS

THE main objective of teaching Mathematics is to help the child to quantify his ideas, to be precise in his thinking and to develop and utilize spatial concepts in his day-to-day life. Significance of mathematics can also be viewed in the context of the revolutionary changes that are taking place in the fields of science and technology which are largely dependent on the strength of mathematical infra-structure. Hence in the present age of rapid industrial and technological changes, a minimum substantial knowledge of Mathematics is essential.

To achieve this, minimum competencies to be developed among the children at the primary stage have been identified as follows :

1. Ability to use numbers
2. Ability to compute
3. Ability to use standard units of money, length, weight, capacity, area and time.
4. Understanding and using fractions
5. Understanding geometrical forms and shapes.

To clarify the competencies, suitable examples have been given. These are only illustrative and not prescriptive.

**Minimum Learning Continuum—Mathematics**

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
<b>1. Ability to use numbers</b>				
(a) Counting numbers up to 100	<ul style="list-style-type: none"> <li>—counting objects from 1 to 100</li> <li>—counting objects in groups of 2's, 3's, 4's, 5's and 10's</li> </ul>	<ul style="list-style-type: none"> <li>—skip-counting in 2's, 5's and 10's</li> </ul>	<ul style="list-style-type: none"> <li>—skip-counting in 3's and 4's</li> </ul>	
(b) Recognising, reading and writing of numbers up to 100,000	<ul style="list-style-type: none"> <li>—recognising, reading and writing numbers from 1 to 9</li> <li>—understanding the concept of zero (informal treatment)</li> <li>—recognising and reading numbers 1 to 100 when presented in digit form</li> <li>—writing numbers from 1 to 100 (from memory, any short sequence for example numbers from 31 to 39)</li> <li>—writing numbers from 1 to 100 (through dictation)</li> <li>—writing numbers from 1 to 10 in words</li> </ul>	<ul style="list-style-type: none"> <li>—recognising and reading numbers from 101 to 1,000</li> </ul>	<ul style="list-style-type: none"> <li>—recognising and reading numbers from 1,001 to 10,000</li> </ul>	<ul style="list-style-type: none"> <li>—recognising and reading numbers from 10,001 to 100,000</li> </ul>

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
(c) Comparing and arranging numbers up to 10,000	<ul style="list-style-type: none"> <li>—comparing two numbers (up to 99) without using formal symbols (greater than, less than, equal to)</li>   <li>—arranging randomly chosen numbers between 1 to 100 in ascending or descending order</li> </ul>	<ul style="list-style-type: none"> <li>—comparing two numbers (up to 100) using formal symbols</li> </ul>	<ul style="list-style-type: none"> <li>—comparing two numbers (up to 1,000) using formal symbols</li> </ul>	<ul style="list-style-type: none"> <li>—comparing two numbers (up to 10,000) using formal symbols</li> </ul>
(d) Understanding the concept of place value of numbers (up to 5 digits)	<ul style="list-style-type: none"> <li>—understanding the concept of place value of numbers up to 2 digits</li> </ul>	<ul style="list-style-type: none"> <li>—understanding the concept of place value of numbers up to 3 digits</li> </ul>	<ul style="list-style-type: none"> <li>—understanding the concept of place value of numbers up to 4 digits</li> </ul>	<ul style="list-style-type: none"> <li>—understanding the concept of place value of numbers up to 5 digits</li> </ul>
(e) Recognising and reading Roman numerals (up to XII)		<ul style="list-style-type: none"> <li>—recognising and reading Roman numerals I to XII</li> </ul>		
(f) Recognising and reading the ordinal numbers up to 100th	<ul style="list-style-type: none"> <li>—recognising and reading ordinal numbers from 1st to 10th</li> </ul>	<ul style="list-style-type: none"> <li>—recognising and reading ordinal numbers up to 100th</li> </ul>		

## 2. Ability to compute

(a) Adding two or more numbers (sum not to exceed 100,000)

—performing addition operation with objects (not more than 100) understanding the concept of adding zero to any number

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
	<ul style="list-style-type: none"> <li>- adding two or more numbers (sum not to exceed 100) without and with carrying</li> </ul>	<ul style="list-style-type: none"> <li>- adding two or more numbers up to 3 digits (sum not to exceed 1,000)</li> </ul>	<ul style="list-style-type: none"> <li>- adding two or more numbers up to 4 digits (sum not to exceed 10,000)</li> </ul>	<ul style="list-style-type: none"> <li>- adding two or more numbers up to 5 digits (sum not to exceed 1,00,000)</li> </ul>
(b) Subtracting one number from another number (up to 5-digit number)	<ul style="list-style-type: none"> <li>- performing subtraction operation with objects</li> </ul>	<ul style="list-style-type: none"> <li>- subtracting a 2-digit number from another 2-digit number (without borrowing)</li> </ul>	<ul style="list-style-type: none"> <li>- subtracting a 3-digit number from a 4-digit number</li> </ul>	<ul style="list-style-type: none"> <li>- subtracting a 5-digit number from a</li> </ul>
	<ul style="list-style-type: none"> <li>- understanding the concept of subtracting zero from any number</li> </ul>			
(c) Multiplying a number by another number (multiplier may be up to 3-digit number)	<ul style="list-style-type: none"> <li>- performing simple multiplication operation using objects</li> </ul>	<ul style="list-style-type: none"> <li>- preparing, writing and learning multiplication tables of 2, 3, 4, 5 and 10</li> </ul>	<ul style="list-style-type: none"> <li>- preparing, writing and learning multiplication tables from 6 to 9</li> </ul>	<ul style="list-style-type: none"> <li>- preparing, writing and learning multiplication tables of 11 and 12</li> </ul>
		<ul style="list-style-type: none"> <li>- multiplying 1-digit number by 2, 3, 4, 5 and 10</li> </ul>	<ul style="list-style-type: none"> <li>- understanding the concept of multiplying a number by zero and one</li> </ul>	
		<ul style="list-style-type: none"> <li>- multiplying numbers by 10 and 100 (product not to exceed 1,000)</li> </ul>		<ul style="list-style-type: none"> <li>- understanding various terms of multiplication such as multiple, multiplier, product</li> </ul>

Competencies	Classe I & II	III	IV	V
		—multiplying a 2-digit number by a 2-digit number without carrying (product not to exceed 1,000)	—multiplying a number by a number up to 3 digits (product not to exceed 10,000)	—multiplying a number by a number up to 3 digits (product not to exceed 100,000)
(d) Dividing a number by another number (dividend may be up to 4-digit number and divisor may be up to 2-digit number)	—developing idea of division through exact grouping of objects in 2's, 3's, 4's, 5's and 10's	—dividing a number up to 3 digits by 1-digit number (without borrowing and without remainder)	—understanding various terms of division such as divisor, dividend, quotient, remainder	—dividing a number up to 3 digits by a number not exceeding 12 (with borrowing and remainder)
(e) Solving problems involving three operations (using not more than 5-digit number at any stage in the operations)	—solving simple addition and subtraction problems in day-to-day life (using not more than 2-digit number at any stage in the operations)	—solving simple multiplication and division problems in day-to-day life (using not more than 3-digit number at any stage in the operations)	—solving problems involving two operations addition and subtraction (using not more than 3-digit number at any stage in the operations)	—solving problems involving multiplication and division or any two operations (using not more than 4-digit number at any stage in the operations)

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
(f) Using unitary method to solve simple problems of day-to-day life			— solving simple problems using unitary method	— using unitary method to solve simple problems of day-to-day life
3. Ability to use standard units of money, length, weight, capacity, area and time				
(a) Recognising all Indian coins and currency notes	—recognising all currency notes (up to Rs. 10)			
(b) using coins and currency notes in day-to-day transactions	—exchanging a coin in terms of other coins (up to Re. 1)	—converting rupees to paise and vice versa		
	—knowing the relation of a rupee with paise (Re. 1 = 100 paise)	—adding coins to form a required small amount (say, forming 80 p by coins of 50 p, 25 p and 5 p)	—adding and subtracting money through simple transactions	
		—solving simple problems related to buying and selling in day-to-day life (involving not more than two operations)	—solving simple problems related to buying and selling in day-to-day life (involving not more than three operations)	
(c) knowing and using measures of length	—developing idea of length— long and short	—understanding the need for standard units of length, such as metre and centimetre	—understanding the principle of metric system of measurement of length (use of kilometre)	
		—knowing the relationship between kilometre and metre		

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
	<ul style="list-style-type: none"> <li>— measuring lengths approximately, using non-standard units of measurement (such as stick, human foot etc.)</li> </ul>	<ul style="list-style-type: none"> <li>— measuring lengths in metres and centimetres (complete unit)</li> <li>— converting metres into centimetres</li> </ul>	<ul style="list-style-type: none"> <li>— converting kilometres to metres, metres to centimetres and vice versa</li> </ul>	
(d) Knowing and using measures of weight	<ul style="list-style-type: none"> <li>— developing the idea of weight such as heavy and light</li> <li>— knowing about the non-standard units of weight such as stones, marbles, beads etc.</li> <li>— understanding that in a pan balance, unequal weights tilt the balance</li> </ul>	<ul style="list-style-type: none"> <li>— understanding the need for standard unit of weight such as kilogram and gram</li> <li>— knowing about standard weights (50 gm, 100 gm, 200 gm, 500 gm and 1 kg)</li> <li>— forming a required weight by combining available standard weights,</li> <li>— knowing the relationship between kilogram and gram, conversion of kilogram into grams</li> </ul>	<ul style="list-style-type: none"> <li>— solving simple problems involving addition and subtraction related to length</li> <li>— solving simple problems involving the multiplication and division of length in the same unit (in day-to-day life)</li> <li>— solving simple problems involving addition and subtraction related to weight (in same unit)</li> <li>— knowing about the quintal as a unit of weight and its relationship with kilogram and vice-versa</li> <li>— solving simple problems involving multiplication, division related to weight (in same unit)</li> </ul>	<ul style="list-style-type: none"> <li>— solving simple problems involving addition, subtraction, multiplication and division in different units (such as metres and kilometres)</li> </ul>

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
(e) Knowing and using measures of capacity	<ul style="list-style-type: none"> <li>—developing the idea of capacity such as more or less</li> <li>—measuring capacity using non-standard units such as cup, tumbler, bottle etc.</li> </ul>	<ul style="list-style-type: none"> <li>—understanding the need for standard unit of capacity such as litre, millilitre</li> <li>—knowing about standard measures of capacity (100 ml, 200 ml, 500 ml, and 1 litre)</li> </ul>	<ul style="list-style-type: none"> <li>—understanding relationship between litre and millilitre</li> <li>—converting litres to millilitres and vice-versa</li> <li>—solving simple problems using all the four operations related to capacity in different units (in day-to-day life)</li> </ul>	<ul style="list-style-type: none"> <li>—solving simple problems using all the four operations related to capacity in different units (in day-to-day life)</li> </ul>
(f) Calculating area		<ul style="list-style-type: none"> <li>—understanding the idea of surface area</li> <li>—calculating surface area in terms of rectangular objects such as bricks, tiles, etc. (non-standard units)</li> </ul>	<ul style="list-style-type: none"> <li>—finding the surface area of rectangular figures with the help of squared paper</li> <li>—evolving the formula for the area of the rectangle using standard units of area such as sq. cm and sq. metre</li> <li>—using the formula to solve simple problems</li> </ul>	<ul style="list-style-type: none"> <li>—applying the formula to calculate area of rectangular shapes such as floor of the classroom, play-ground, courtyards etc.</li> </ul>
(g) Reading calendar and reading time				
(i) Reading calendar	<ul style="list-style-type: none"> <li>—naming parts of a day in sequence</li> <li>—naming the days of the week in sequence</li> </ul>	<ul style="list-style-type: none"> <li>—naming and writing the days of the week and months of the year in sequence</li> </ul>	<ul style="list-style-type: none"> <li>—reading the calendar and relating days and dates</li> </ul>	<ul style="list-style-type: none"> <li>—reading the local days and months of Indian calendar</li> </ul>

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
	—knowing the relationship of days with the week and months with the year	—reading the calendar to find out days in each month	—writing the day, date, month, year on different days	
(ii) Reading time		—reading the clock in hours, half-hour and quarter-hour etc.	—reading the clock in multiples of five minutes	—calculating time in hours and minutes
				—knowing the relationship between (i) day and hours (ii) hour and minutes (iii) minute and seconds
iii) Reading timings from railway or bus time tables written on boards				—reading the bus and railway time-tables written on boards
4. <i>Understanding and using fractions (denominators not to exceed 2 digit number)</i>				
(a) Understanding the structure of proper, improper fractions and mixed fractions (denominators not to exceed 2-digit numbers)	—dividing an object or a group of objects in halves and quarters	—understanding the meaning of fractions with numerator 1 and denominator not exceeding 10	—understanding proper fractions say $\frac{2}{3}$ , $\frac{3}{4}$ etc. and writing them in symbolic form (denominators not to exceed 2 digits)	—understanding the structure of a mixed fraction such as $\frac{1}{4}, 2\frac{1}{2}, 3\frac{3}{4}$ etc. —converting mixed fractions into improper fractions and vice versa

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
		—writing fractions in symbolic form (for example $\frac{1}{2}$ , $\frac{1}{3}$ , $\frac{1}{10}$ )	—understanding the concept of equivalent fractions and writing the equivalent fractions of a given fraction such as: $\frac{1}{2} = \frac{2}{4} = \frac{4}{8}$ etc.	
(b) Adding and subtracting simple fractions and mixed fractions (denominators not exceeding 2-digit numbers)			—adding simple fractions with same denominators	—adding and subtracting two or more fractions with denominators not exceeding 10
5. <i>Understanding geometrical forms and shapes</i>				
(a) Recognising and classifying various solids available in the environment (cuboid, cube, sphere, cone, cylinder)	—recognising and classifying various solids available in the environment on the basis of their shapes	—classifying various solids with their geometrical names (cuboid, sphere, cube, cone, cylinder)		
(b) Recognising and classifying plane shapes (square, rectangle, circle and triangle)	—recognising and classifying various plane shapes without mentioning their geometrical names	—naming and classifying plane shapes (square, rectangle, circle and triangle)		
(c) Recognising a point, a line and an angle			—recognising a point, a line and an angle	
(d) Drawing a point, a line, an angle and plane shapes		—drawing plane shapes with the help of objects (shapes like square, rectangle, triangle and circle)	—Drawing a point and a line of given length (in centimetres) with a scale —Drawing of angles with protector	—drawing a circle of given radius with the use of compass —Drawing of shapes with the help of ruler, protector, etc.

### ENVIRONMENTAL STUDIES

EDUCATION, to be effective at the primary school stage, i.e., from Classes I to V, must be through the environment, about the environment and for the environment. The Minimum Learning Continuum in Environmental Studies presented here, deals with the total environment which includes both natural and social environment.

The Environmental Studies approach is basically skill oriented. It helps children to acquire certain skills or competencies. For developing Minimum Learning Continuum certain competencies attainable at the end of Class V, have been identified. Each of these competencies has been broken into sub-competencies which have been placed in a graded progression to form a continuum. For practical considerations the continuum has been stated under Classes I and II, III, IV and V. Placement of sub-competencies under each class, however, is not rigid. The teachers are free to make adjustments wherever necessary. While identifying competencies like formulating questions, classification, finding out cause and effect relationship, drawing inferences etc., the level of achievement in the continuum has been determined on the basis of mental maturity of the child. These competencies along with some other higher competencies will be extended and further deepened in the subsequent stages of education.

At some places in the continuum examples from the content area related to the environment have been given to clarify the scope of the competencies. These examples are only illustrative and not prescriptive. It would be seen that for each class a number of competencies have been selected. Though there is no logical hierarchy in arranging them from top to bottom, some competencies are basic and essential for the development of others. For example, observation would form the basis for the development of a number of other competencies. To read Minimum Learning Continuum meaningfully for a particular class it is suggested that sub-competencies should be read from top to bottom before going to the next class. It may be pointed out that one activity may help in the development of more than one competency and similarly many activities may lend support for the development of one competency.

## Minimum Learning Continuum—Environmental Studies

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
1. Observing and formulating precise questions relating to natural and social environment	<p>—observing and asking questions for recognition of : uses of :</p> <p>(a) objects like stones, soil, stones, plants animals, etc.</p> <p>(b) places like school, post office, hospital, houses of worships, panchayat ghar, etc.</p>	<p>—observing and asking questions about uses of :</p> <p>(a) stones, soil, plants animals, etc.</p> <p>(b) school, post office, hospital, houses of worships, panchayat ghar, etc.</p>	<p>—observing and asking questions for comparison in respect of :</p> <p>(a) growth of plants, animals, changes in weather etc.</p> <p>(b) housing occupation etc.</p>	<p>—observing and finding out causes for change in : respect of :</p> <p>(a) weather, growth of plants etc.</p> <p>(b) occupation, food habits, customs etc.</p>
2. Recording and reporting systematically	<p>—reporting orally observed objects, events natural phenomena, etc.</p>	<p>—reporting observed objects, events, phenomena using simple methods of recording time, distance and direction</p>	<p>—recording observed events, phenomena in writing and in the form of diagram using tables and bar-graphs</p>	<p>—recording results of simple activities quantitatively e.g. tables and bargraphs—what is the most common ? what is the least common ?</p>
3. Collecting information from relevant sources for using it in a given situation.	<p>—collecting information based on observation</p>	<p>—collecting information and simple data from members of the community like grocers, farmers—simple comparison of collected data based on concrete situation</p>	<p>—collecting information and data from books, radio and newspapers</p>	<p>—using information and data relevant to a given situation for drawing inference and conclusion and for making decisions based on these</p>

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
4. Classifying objects, events, phenomena, social and physical data based on given criteria	<p>—grouping different objects on the basis of shape, size, colour etc.</p> <p>—grouping social institutions on the basis of given criteria like their functions, uses etc.</p> <p>grouping social events on the basis of given criteria like the time of their occurrence, their nature (festivals—national, seasonal and religious)</p>	<p>—classifying objects into individual sets</p>	<p>—grouping objects based on two or three features at a time using overlapping sets</p> <p>—arranging the classified objects in a sequence.</p>	<p>—arranging in sequence objects and phenomena for finding out relationship</p>
5. Identifying and understanding cause and effect relationship	<p>concrete cause and effect relationship of simple nature based on concrete experiences like what happens if I touch a hot object ?</p>	<p>identifying cause and effect relationship of more complex nature like</p> <p>(a) growth of plants due to good soil, manure, irrigation etc.</p> <p>(b) movement of objects due to force</p>	<p>identifying and understanding the causes and effects of natural phenomena like weather and climate on various aspects of the life of man—his dress, housing, food habits and professions etc. (examples to be given from locality, state and from different regions of the country)</p>	<p>identifying and understanding the effects of developmental projects like building bridges, dams etc. on the life of the people (examples from the locality, state and from different regions of the country)</p>
6. Drawing simple inferences on the basis of experiences	<p>—drawing inferences on the basis of simple</p>		<p>—drawing simple inferences on the basis of experiments and surveys for example</p> <p>(a) soil gets eroded if there is heavy rainfall</p>	

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
		observations, for example	(b) plants and animals depend on each other for food and shelter	
		(a) crops are poor if rainfall is less	(c) people belonging to various professions depend on each other for their requirements	
		(b) students are absent from the school when the harvesting season is on	(d) prices of the commodities are high if their supply is less	
			(e) larger families normally lead to poverty and unhappiness	
7. Designing simple experiments to solve problems	—using simple trial and error to find out answer to the questions e. g. of ten objects which ones sink and which ones float	—performing simple experiments to answer problems at a little higher level	—performing experiments involving more complex questions	—designing simple experiments to answer day-to-day problems using comparative data
8. Drawing free hand maps and locating places in the map				
(i) Drawing free hand maps and tracing of maps	—drawing free hand map of classroom, school, field etc.	—drawing free hand maps of places like classroom indicating teacher's position, position of black board etc.	—drawing free hand maps of places like school, fields, and villages	—tracing the map of the State and the country indicating important towns, rivers, mountains etc.
(ii) Locating places in the map			—locating important places	—tracing the map of district indicating places in it
		—locating one's own village on the map of the district	—locating important places such as rivers, mountains in the map of the State	—identifying the location of the states and union territories, important cities

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
				and towns; important physical fea- tures etc. in the map of India
(iii) Indicating directions and distance	—indicating directions of school, post office, temple etc. from one's home, e.g., left, right, using landmarks etc.	—indicating the direction of various places in the map of the district	—indicating the direction of various places on the map of the State	—indicating the direction of different places in the map of the country
9. Taking care of living things in the environment and showing interest in the environment	—taking care of plants like avoiding trampling of plants, indiscriminate plucking of flowers	—taking general care of plants through watering etc.	—collecting information about the ways in which plants and animals are conserved	
	—taking care of pet animals like cats, dogs etc.	—taking care of domestic animals		
10. Avoiding wastage of natural resources	—identifying the natural resources in the locality like plants, animals and water etc.	—recognising the use of natural resources in the locality like water for irrigation, fuel for burning	—collecting information about the distribution of the natural resources in the state	—collecting information about the distribution of natural resources in the country
	—developing habits of proper use of natural resources like water, fuel etc.	—recognising the wastage of natural resources like indiscriminate cutting of trees, wastage of fuel etc.	—knowing the effects of wastage like what happens when fuel is wasted, and water is not used properly	—helping elders in the proper use of water, fuel, electricity etc.
		—understanding the dependence of man on natural resources for his requirements		

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
11. Avoiding pollution of natural environment and keeping the surroundings clean	<ul style="list-style-type: none"> <li>—developing proper toilet habits</li> <li>—keeping immediate environment clean</li> <li>—taking part in community cleaning programmes</li> </ul>	<ul style="list-style-type: none"> <li>—identifying sources of pollution of water and steps taken for preventing pollution</li> <li>—checking indiscriminate urination and defecating in public places</li> <li>—keeping the village well protected from wastage and garbage</li> </ul>	<ul style="list-style-type: none"> <li>—assuming responsibility for cleaning the surroundings both inside and outside the school</li> </ul>	<ul style="list-style-type: none"> <li>—helping elders in various actions taken for preventing pollution</li> </ul>
12. Living cooperatively	<ul style="list-style-type: none"> <li>—participating in school prayers, school cleanliness programmes, gardening etc.</li> </ul>	<ul style="list-style-type: none"> <li>—participating in the school activities and functions and sharing responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>—helping elders in planning and organising functions as volunteers</li> <li>—recognising the value of joint responsibilities and cooperative living</li> </ul>	<ul style="list-style-type: none"> <li>—observing community functions and festivals</li> </ul>
13. Showing respect to various cultures and religions	<ul style="list-style-type: none"> <li>—practising respectful behaviours towards children belonging to various castes, communities and regions etc.</li> <li>—participating in the religious and cultural functions and ceremonies of the friends</li> <li>—participating in the celebrations of birthdays of important people belonging to different regions, castes, and religions</li> </ul>	<ul style="list-style-type: none"> <li>—studying the history of various cultural groups and their important personalities from the locality, region and the country to recognise their contribution to the social, political and cultural life</li> </ul>		

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
		—observing and studying the life, customs and traditions of the people living in the locality, region and in the country to understand the variety and common points		
14. Taking care of private and public property	—using things carefully both at home and at school	—using public property of the community carefully	—using public transport, community services etc. carefully	
15. Questioning various practices in the society to negate superstitions	—	—identifying the practices and customs which are based on superstitions	—finding out reasons for observing certain customs and practices based on superstitions	
16. Showing respect to the rules and laws of school, society and the government	—observing punctuality —standing silently and in correct posture when national anthem is sung or national flag is hoisted  —standing in queue  —following the rules of the road	—knowing the rules and laws of panchayat affecting the day-to-day life and practising to serve them	—knowing the main functions of the State and the Central Governments and important persons like Governor and President, Chief Minister and Prime Minister etc.  —understanding the elementary ideas of rights and duties	

### HEALTHY LIVING

HEALTHY LIVING is a *sine qua non* of good life. Primary necessities like food, clothing and shelter are to be maintained hygienically and neatly.

Personal and community hygiene in various aspects along with exercises, food habits and recreation are included in this continuum.

Competencies are stated in the form of knowledge, abilities and practice. Less emphasis is laid on mere knowledge of healthy living and more importance is given to participation in related activities with proper understanding. The activities suggested for different classes in the continua of each competency are not only for those classes but they are to be carried out in subsequent classes as well.

**Minimum Learning Continuum—Healthy Living**

<b>Competencies</b>	<b>Classes I &amp; II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
1. Knowing the nutritive value of locally available food-stuffs and preparing and keeping them in a hygienic way	<ul style="list-style-type: none"> <li>—knowing available food-stuffs in the locality</li> <li>—knowing proper methods of eating food</li> </ul>	<ul style="list-style-type: none"> <li>—classifying food stuffs into groups, such as pulses, cereals etc.</li> <li>—understanding the causes of food being spoilt due to dust, flies etc.</li> </ul>	<ul style="list-style-type: none"> <li>—differentiating between food suitable for healthy and sick people</li> <li>—understanding importance of regular food habits</li> </ul>	
2. Participating in activities related to storage, purification and hygienic use of water	<ul style="list-style-type: none"> <li>—distinguishing between clean and dirty water</li> <li>—using clean vessel and clean water for drinking</li> </ul>	<ul style="list-style-type: none"> <li>—participating in purification of water by boiling, filtering or decantation</li> <li>—understanding the need for storing water safely</li> </ul>	<ul style="list-style-type: none"> <li>—participating in activities adopted for keeping the sources of water clean</li> <li>—using alum and potassium permanganate for purifying water</li> </ul>	<ul style="list-style-type: none"> <li>—participating in activities related to storage and proper use of clean water and helping peers in doing so</li> </ul>
3. Understanding the importance of personal hygiene and participating in activities related to personal hygiene in school and its surroundings	<ul style="list-style-type: none"> <li>—washing and cleaning, hands, feet, mouth, teeth, nails, ears etc. in a hygienic manner</li> <li>—knowing proper use of urinals and latrines in the school and outside</li> </ul>	<ul style="list-style-type: none"> <li>—recognising the importance of and cultivating proper habits in personal cleanliness and the cleanliness of school and its surroundings</li> </ul>	<ul style="list-style-type: none"> <li>—participating in and guiding the peers in all activities related to personal hygiene</li> <li>—understanding simple preventive measures for avoiding spread of communicable diseases</li> </ul>	

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
		—understanding the causes and spread of common diseases		
*4. Knowing and participating in activities related to community hygiene	—knowing the location and use of sanitary facilities in the community	—understanding the need for and making proper use of sanitary facilities in the community	—proper and habitual use of sanitary facilities in the community	—helping the peers in the proper use of sanitary facilities in the community
		—understanding the importance of and need for immunisations from common diseases	—taking advantage of immunisation facilities available in the community	
5. Participating in physical education and recreation	—taking part in free movement exercise —sitting and standing in correct postures	—running and jumping in correct postures	—taking part in formal P.T. exercises	—participating in mass P.T., marching and exercises rhythmically
(b) Practising Asanas		—participating in Padmasana and Surya Namaskar		
(c) Taking part in games	—taking part in games involving only free movements	—taking part in small area games involving free movements	—taking part in team games like Kabaddi, Kho-Kho and ball games	
(d) Participating in recreational activities	—taking part in recreation through free movements, i.e., imitating the birds, animals etc.	—taking part in short hiking trips to nearby places	—taking part in recreational games involving skills, like shooting a ball, throwing a ball into the net, jumping to a particular height etc.	

\* Where sanitary facilities are not available in the community children should be instructed and guided in the use of available material like earth to cover spots used for urination and defecation

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
6. Understanding the importance of safety measures and using elementary First-Aid methods	—taking precautionary measures while walking, jumping and playing etc.	—observing methods and materials used in First-Aid	—knowing and using First-Aid measures for : (i) extinguishing fires (ii) fractures (iii) burns and scalds (iv) snake bites (v) person rescued from drowning	—helping peers in using First-Aid measures

### **SOCIALLY USEFUL PRODUCTIVE WORK**

SOCIALLY useful productive work has been accepted as a necessary and integral part of the Primary Education Curriculum. It should not be viewed as an isolated subject but as the focal point from which many learning competencies in other subject areas as well as general attitudes and values, such as self-reliance, dignity of labour, patience, liking for hard work and social service etc. germinate.

It is suggested that the teachers may as far as possible have to utilise the locally available materials for planning activities in this area. A lot of work can be done in the school premises and the community without costly equipments or high expertise.

Socially Useful Productive Work will differ from state to state and area to area. Hence, the proposed continuum should be adapted according to requirements and respective needs of the locality.

**Minimum Learning Continuum – Socially Useful Productive Work**

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
1. Recognising and appreciating the contribution made to the community by different occupations and different types of work including social work	—broadly observing main occupations and different kinds of work in the surroundings, (e.g. carpentry, smithy and any other occupation in the locality)	—understanding the use of products of various occupations by people in the surroundings	—analysing the ways in which we depend upon these products and other occupations for our daily life	—appreciating the contributions of various people to our happiness and understanding dependency web
2. Participating in manual and other work in and around the home	—helping himself in simple tasks like keeping own things tidy	—doing manual work at home and school neatly	—understanding the need of doing work and acquiring skills	—appreciating work done by others and enthusiastically doing one's own work
3. Participating in the work of the school and community co-operatively and enthusiastically	—following leader's instructions in doing manual work in school  —showing zeal and eagerness in doing work, for example maintaining play-fields, garden, etc.	—helping classmates in the work in addition to doing one's work  —doing the work independently, neatly and in cooperation	—understanding method of doing one's work with skill to avoid wastage	—taking part in planning and execution of work in groups and appreciating others' good work e.g. planning for improvement, of play-field, organizing National Day celebration, picnic etc.

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
4. Showing concern for the judicious use of resources in work situations	—taking care not to waste materials in work	—understanding the need for careful use of materials and persuading others not to waste	—making right use of available resources and time	—analysing the whys and wherefores of processes of work —doing one's work carefully and economically
5. Using and maintaining simple work tools with safety	—observing the various tools in working situations  —following instructions in the use of simple tools  —using simple work tools with safety	—understanding precautions in the use of tools  —avoiding dangerous practices	—analysing materials, use of tools, purpose of their use and using them economically, efficiently and safely	—using habitually materials and tools with economy
6. Keeping the working environment clean and tidy	—following instructions for cleanliness and neatness in work	—enjoying doing one's bit to keep environment clean and tidy in working situations	—understanding the need for keeping place of work clean and tidy	

**CREATIVE EXPRESSION**

**CREATIVE** expression is children's expression of imagination regarding objects, ideas and feelings in various forms. The purpose is to develop creativity and aesthetic expression through drawing, painting, displaying, decorating, modelling, music, dance and drama.

The teachers are expected to use local situations, locally available materials and equipments and inexpensive improvised tools. The stages indicated on the continuum should not be taken as rigid frames of competencies. The development in creative expression goes on gradually deepening and broadening like the flow of a river. Hence, it is not possible to demarcate the end points of the process at the end of each class.

### Minimum Learning Continuum : Creative Expression

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
<i>Appreciating beautiful things</i>				
1. Drawing simple things like trees, animals, human beings etc.	<ul style="list-style-type: none"> <li>—drawing things of interest from the local environment (shapes may not be recognisable)</li> </ul>	<ul style="list-style-type: none"> <li>—drawing things from imagination</li> </ul>	<ul style="list-style-type: none"> <li>—drawing things in details they have observed and liked</li> </ul>	<ul style="list-style-type: none"> <li>—depicting scenes and situations from life and nature such as boat going in the river, sunrise, man working in the field etc.</li> </ul>
2. Using opportunities for artistic expression related to local life through song, dance, drama etc.	<ul style="list-style-type: none"> <li>—drawing from imagination trees, animals, human beings etc. from their environment</li> </ul>	<ul style="list-style-type: none"> <li>—drawing both recognisable and non-recognisable shape of things they have observed</li> </ul>	<ul style="list-style-type: none"> <li>—using geometrical shapes to form different animals, plants etc.</li> </ul>	
	<ul style="list-style-type: none"> <li>—reciting simple lullaby songs and ceremonial songs of the neighbourhood</li> </ul>	<ul style="list-style-type: none"> <li>—reciting simple folk songs</li> </ul>	<ul style="list-style-type: none"> <li>—singing with rhythm the National Anthem, national songs and folk tunes (in chorus)</li> </ul>	
	<ul style="list-style-type: none"> <li>—making movements of hands and feet with rhythm</li> </ul>	<ul style="list-style-type: none"> <li>—making movements of hands, feet and body with the folk tune of a song</li> </ul>	<ul style="list-style-type: none"> <li>—singing individually or in chorus</li> </ul>	
	<ul style="list-style-type: none"> <li>—enacting simple dance drama based on rhymes or poems</li> <li>—mimicking sounds of animals</li> </ul>			
	<ul style="list-style-type: none"> <li>—performing folk dances of the area with folk music</li> </ul>	<ul style="list-style-type: none"> <li>—enacting scenes based on some of the themes from their textbooks</li> </ul>	<ul style="list-style-type: none"> <li>—monoacting</li> </ul>	

<i>Competencies</i>	<i>Classes I &amp; II</i>	<i>III</i>	<i>IV</i>	<i>V</i>
3. Displaying and decorating with locally available articles	<ul style="list-style-type: none"> <li>-making collections of things like feathers, stones, shells, twigs etc. (which are locally available)</li> </ul>	<ul style="list-style-type: none"> <li>-using flowers and paper garlands etc. for decoration</li> </ul>	<ul style="list-style-type: none"> <li>-decorating classrooms and home with coloured paper, Rangoli and painted pots for different functions and festivals</li> </ul>	
4. Modelling with clay or card-board	<ul style="list-style-type: none"> <li>-making collages by using different materials and colours or scrap materials of daily use</li> </ul>	<ul style="list-style-type: none"> <li>-making simple forms of some familiar local objects like fruit, vegetables, fish, snakes etc.</li> </ul>	<ul style="list-style-type: none"> <li>-making simple human and animal forms and other familiar objects with clay</li> </ul>	<ul style="list-style-type: none"> <li>-making models of huts made by card-board, clay or bamboo with clay</li> </ul>
	<ul style="list-style-type: none"> <li>-making different objects with clay, paper cuts and cloth pieces etc.</li> </ul>	<ul style="list-style-type: none"> <li>-making model of hut with card-board</li> </ul>	<ul style="list-style-type: none"> <li>-making statues of clay fixing pebbles into clay for decoration and showing details</li> </ul>	

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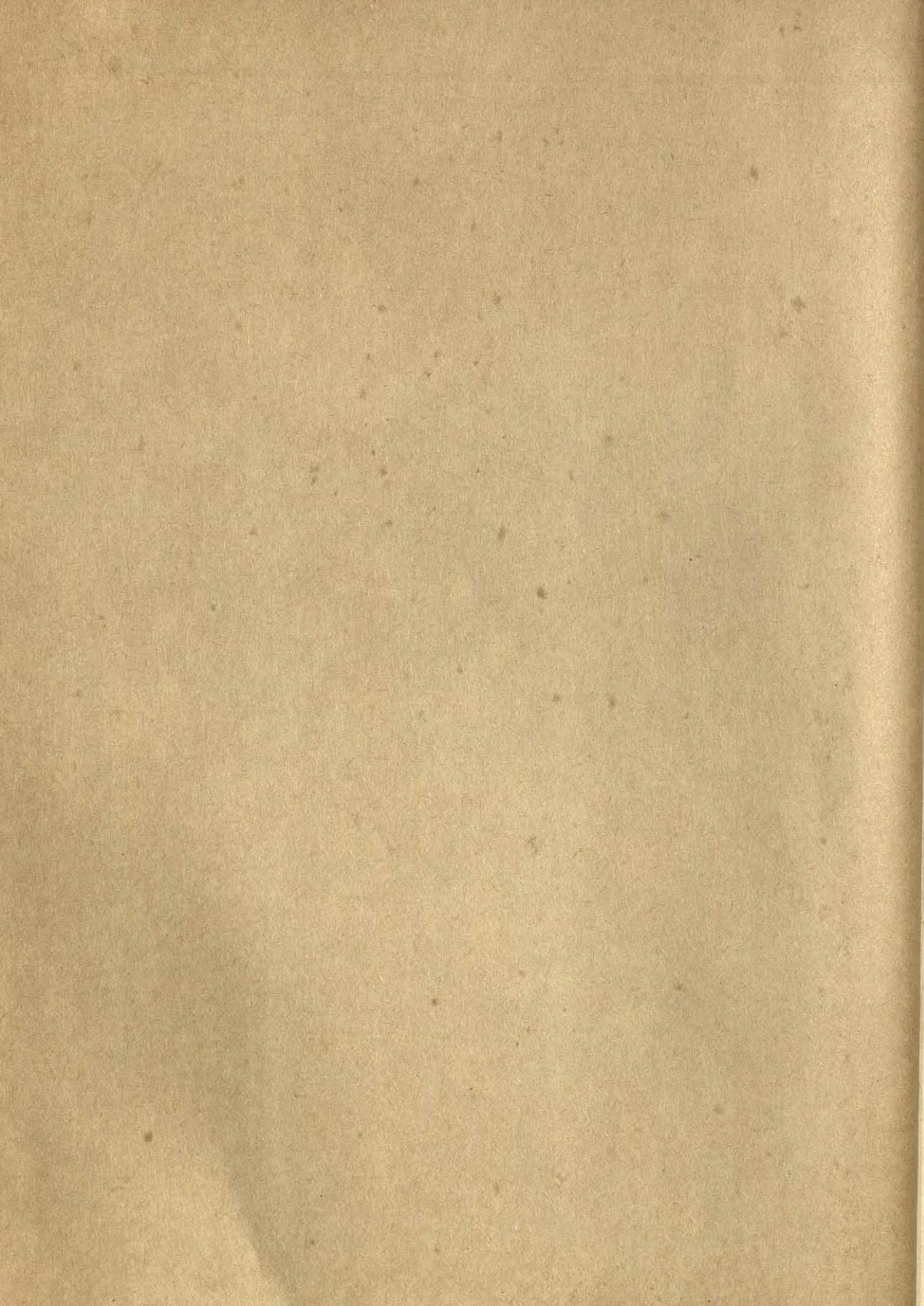
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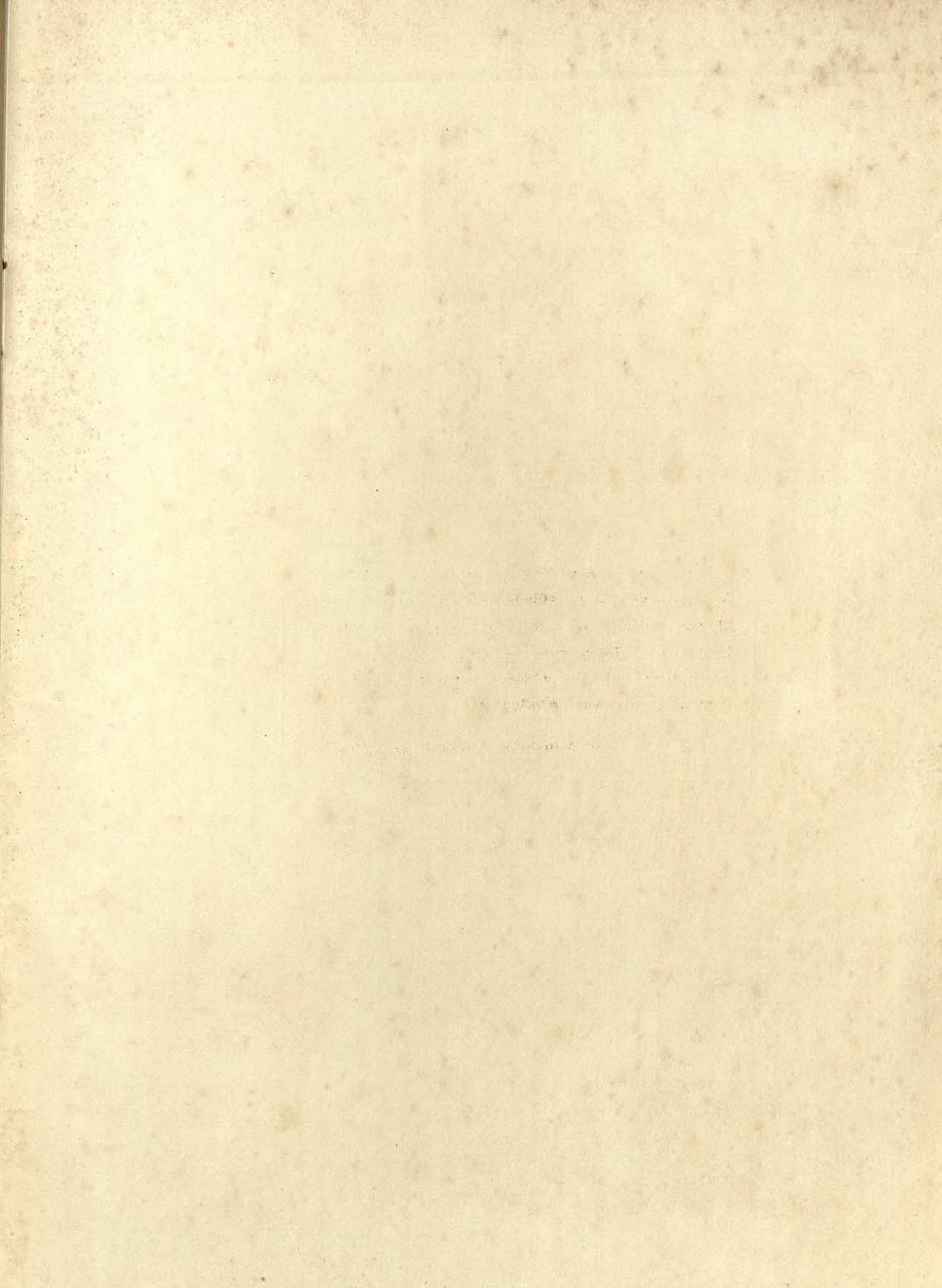
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The provision of free and universal education for every child is an educational objective of the highest priority not only on grounds of social justice and democracy, but also for raising the competence of the average worker and for increasing national productivity

*—Education Commission, 1964-66*